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CAMPTOPTEROHELEA A NEW GENUS OF CERATOPOGONIDAE FROM THE PHILIPPINES (DIPTERA)

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In a collection of Philippine *Culicoides* which Chicago Natural History Museum lent to us for study, we found a single specimen of a ceratopogonid midge so distinctive that we propose to erect a new genus for it.

Camptopterohelea,¹ new genus

Taxonomic position uncertain, but belonging in the subfamily Ceratopogoninae. The short costa, two short radial cells, humeral pits and stout dark brown body and legs indicate affinities with *Helea* in the Ceratopogonini. The presence of a single tarsal claw on all legs of the female, the folded, microspinose wings with reduced medial venation, the reduced styliform palpus, the broadly separated eyes, and the rudimentary mouth parts are characters, alone or in combination, which are unique in the tribe and the family.

Type species.—*Camptopterohelea hoogstraali*, new species, monobasic.

¹ Greek *Camptos* (bent) + *Pteron* (wing) + *Helea* (a genus of midge).

Camptopterohelea hoogstraali, new species

FEMALE: Length of wing 0.79 mm.; breadth of wing 0.43 mm. A uniformly dark brown species without distinctive markings; wings unmarked.

Head: Eyes very broadly separated by a distance approximately equal to length of entire palpus; vertex in interocular space with three small hairs; eyes not hairy between facets. Antenna (fig. 25, b) 15-segmented; first segment concealed in head capsule, 22 by 40 units, higher than broad, with three small hairs; second segment greatly swollen, forming a torus slightly longer than broad, about 35 by 40 units; distal segments forming a 13-segmented flagellum, each segment about 10 units in diameter; lengths in proportion (from head distad) of 24-20-20-20-21-22-22-22-25-26-26-28-37, antennal ratio (last 5 segments divided by preceding 8) 0.83; all flagellar segments with a proximal whorl of 4-5 moderately long verticils, distal 5 segments in addition with a few scattered long, very fine hairs and short, curved, hyaline sensoria, and preceding 8 segments each with a pair of long, semi-appressed, straight, hyaline sensoria. Palpus (fig. 25, c) very short, degenerated from a primitive 5-segmented condition, the primitive first and second segments absent; third segment (apparent first) moderately swollen on distal two-thirds, measuring 15 by 30 units, and bearing a small, round, deep sensory pit just past mid-length on dorsomedian surface; fourth and fifth segments fused and imperfectly separated from third, forming a tapering style 20 units long with blunt tip. Proboscis rudimentary, about two-thirds as long as palpus, the mouth parts present but small, and mandibles without teeth.

Thorax: Moderately stout, shaped as in *Helea*, dark brown; scutum with a submedian pair of oval hyaline pits toward anterior margin, with a few short, scattered, bristly, suberect hairs. Legs (fig. 25, e, f) moderately stout (relative lengths of segments given in table), with a few short, bristly hairs, without any spinose armature; front tibia with a lanceolate spur and a compact comb of about 12 bristly hairs, mid tibia without spur or comb; hind tibia without spur but with comb of about 20 bristly hairs; hind basitarsus with rows of sharp spinose hairs ventrally; fourth tarsomere short and broad but not cordiform, fifth tarsomere cylindrical and unarmed, bearing a single long, stout, slightly curved claw at apex; claws each about two-thirds as long as fifth tarsomere.

Wing greatly modified, as in figure 25, a; broad on basal half, tapering distally; costa extending to 0.57 of wing length; two radial cells present, the first long but the second very short, the radial veins thickened; venation of remainder of wing difficult to determine, apparently only the cubital stem and 1A present with Cu, possibly following the posterior wing fold to wing margin. Disc of wing modified with a double transverse fold from end of costa to end of Cu, proximally and about halfway from this line to wing tip distally, the area between the folds with fine, very dense, modified brownish microtrichia; remainder of wing with less dense but similar microtrichia on base of wing, but with very long, spinelike microtrichia in an irregular band along vein Cu₁, over radial cells and along margin of proximal fold, and in a large patch on distal fourth of wing past the distal fold; macrotrichia absent. Halter pale.

Abdomen: Short and stout, dark brown; a single large, heavily sclerotized, oval spermatheca (fig. 25, d) present, measuring 0.080 by 0.051 mm., with short sclerotized neck.

Type.—Holotype female, from the east slope of Mount McKinley, elevation 3300 ft., Davao Province, Mindanao, collected September 25, 1946, by F. G. Werner, at light. Type (mounted on a slide) deposited in Chicago Natural History Museum.

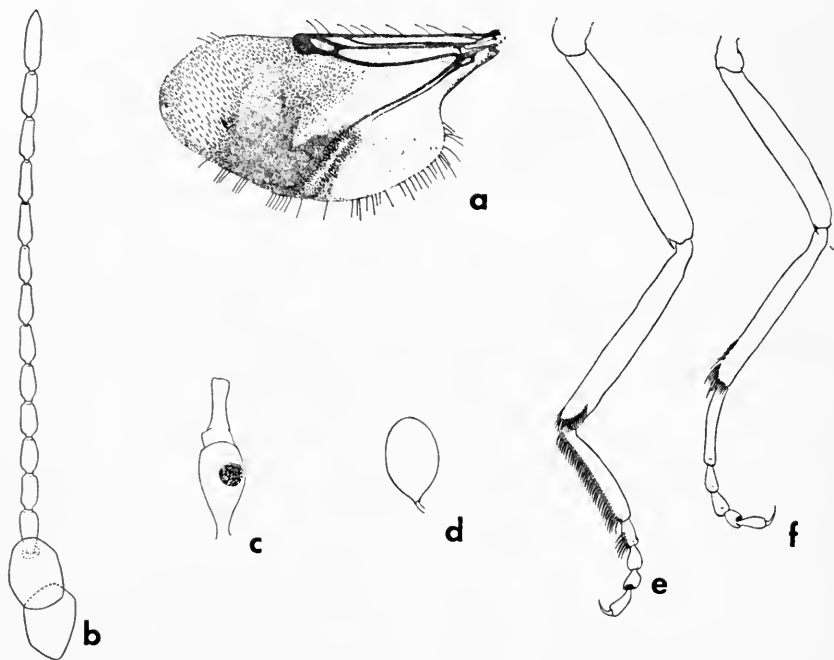


FIG. 25. *Camptopterohelea hoogstraali*, new sp., female: a, wing; b, antenna; c, palpus; d, spermatheca; e, hind leg, femur to tarsus; f, fore leg, femur to tarsus. Drawing by Miss Thelma Ford.

Discussion.—We are pleased to name this species in honor of Dr. Harry Hoogstraal, leader of the Chicago Natural History Museum Philippine Zoological Expedition, 1946–47, in appreciation of his keen interest in the taxonomy of blood-sucking insects.

Proportion of Lengths of Segments of Legs of *Camptopterohelea hoogstraali*

Leg	Femur	Tibia	Tarsi				
			I	II	III	IV	V
Fore leg.....	63	65	30	10	8	8	12
Mid leg.....	80	80	38	10	8	7	10
Hind leg.....	80	80	40	10	8	7	11

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